



## Safety Data Sheet

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### 1. Identification of the substance/mixture and of the company/undertaking

**Product identifier:**

Product name: Succinonitrile

Product code(SDS NO): 7414E-1

**Details of the supplier of the safety data sheet**

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 14-10, Technopark, Sanda-shi, HYOGO 669-1339, JAPAN (Sanda factory)

Division: Safety Management Dept. of Chemicals

Telephone number: 079-568-1531

FAX: 079-568-1644

e-mail address: kagakuhinanzenkanri@kishida.co.jp

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### 2. Hazards identification

**GHS classification and label elements of the product****Classification of the substance or mixture****HEALTH HAZARDS**

Acute toxicity Oral: Category 4

Acute toxicity Inhalation: Category 3

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

Specific target organ toxicity – single exposure: Respiratory tract irritation Category 3

**Label elements**

Signal word: Danger

**HAZARD STATEMENT**

Harmful if swallowed

Toxic if inhaled

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

**PRECAUTIONARY STATEMENT****Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash contaminated parts thoroughly after handling.

Wear protective gloves.

Wear eye protection/face protection.

Do not eat, drink or smoke when using this product.

**Response**

Call a POISON CENTER or doctor/physician.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if



present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

#### Storage

Store in a well-ventilated place. Keep container tightly closed.

#### Disposal

Dispose of contents/container in accordance with local/national regulation.

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### 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### Substance

Ingredient name: Succinonitrile

Content(%): 99(min)

Chemical formula: C<sub>4</sub>H<sub>4</sub>N<sub>2</sub>

Chemicals No, Japan: 2-1526; 2-2771

CAS No.: 110-61-2

MW: 80.1

ECNO: 203-783-9

Note : The figures shown above are not the specifications of the product.

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### 4. First-aid measures

#### Descriptions of first-aid measures

##### General measures

Call a POISON CENTER or doctor/physician.

##### IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

##### IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

##### IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

##### IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

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### 5. Fire-fighting measures

#### Extinguishing media

##### Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

#### Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

#### Advice for firefighters

##### Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters



Wear fire/ flame resistant/retardant clothing.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

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#### 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

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#### 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Avoid breathing dust/fume/gas/mist/vapors/spray.

(Protective measures against fire & explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures/Incompatibility

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Store in a cool, dry place. Do not store in direct sunlight.

keep under lock and key.

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#### 8. Exposure controls/personal protection

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Safety and Health measures



Wash ... thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Take off contaminated clothing and wash it before reuse.

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## 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Crystalline solid

Color: White

Odor: Odorless

Phase change temperature

Initial Boiling Point/Boiling point: 265°C

Melting point/Freezing point: 54°C

Flash point: (Succinonitrile) 132°C

Relative Vapor Density (Air=1): 2.1

Specific gravity/Density: 1.02

Solubility

Solubility in water: 13g/100ml (20°C)

n-Octanol /water partition coefficient: log Pow -0.99

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## 10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Decomposes on burning. Decomposes on contact with acids. This produces toxic and corrosive fumes including nitrogen oxides and cyanides. Reacts with strong bases. This produces ammonia. Reacts with strong oxidants and strong reducing agents. (ICSC 1497)

Incompatible materials

Acids, Strong bases, Strong oxidizing agents, Strong reducing agents

Hazardous decomposition products

Nitrogen oxides, Cyanides, Ammonia

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## 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Company proprietary data]

(Succinonitrile)

rat LD50: 450mg/kg

Acute toxicity (Inhalation)

[Company proprietary data]

(Succinonitrile)

rat LCLo=730mg/m<sup>3</sup>/4h

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

No Teratogenic effects data available

No reproductive toxicity data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT



STOT-single exposure

[cat.3(resp. irrit.)]

[Company proprietary data]

(Succinonitrile) Respiratory tract irritation ( respiratory tract irritation )

No Aspiration hazard data available

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## 12. Ecological Information

Toxicity

No Aquatic toxicity data available

Water solubility

(Succinonitrile)

13 g/100 ml (20 C) (ICSC, 2004)

No Persistence and degradability data available

Bioaccumulative potential

(Succinonitrile)

log Pow=-0.99 (ICSC, 2004)

No Mobility in soil data available

Ozone depleting chemical data not available

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## 13. Disposal considerations

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

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## 14. Transport Information

UN number: 3439

UN proper shipping name:

NITRILES, SOLID, TOXIC, N.O.S.

Transport hazard class(es): 6.1

Packing group: III

ERG GUIDE NO.: 151

Special provisions NO.: 223; 274; A3; A5

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## 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US major regulations

TSCA

Succinonitrile

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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## 16. Other information

GHS classification and labelling

Acute Tox. 4: H302 Harmful if swallowed

Acute Tox. 3: H331 Toxic if inhaled

Skin Irrit. 2: H315 Causes skin irritation

Eye Irrit. 2A: H319 Causes serious eye irritation

STOT SE 3: H335 May cause respiratory irritation

Reference Book



Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table 3-1 ECNO6182012) 2012 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2017 TLVs and BEIs. (ACGIH)  
<http://monographs.iarc.fr/ENG/Classification/index.php>  
Supplier's data/information

**General Disclaimer**

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determine the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2015).